Notice of Allowability	Application No.	Applicant(s)	
	09/988,438	TAKAGI ET AL.	
	Examiner	Art Unit	
	Mark P. Francis	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *02/14/06*.
2. ☒ The allowed claim(s) is/are ~~*1-20*~~, *now renumbered as claims 1-12* (1-2, 6, 8, 10-12, 14, 16-18, 20).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. This Office Action is responsive to the communication filed February 14, 2006.

2. Per applicant's request, amended claims 1,2,10-11, and 16-17 have been entered. Claims 3-5,7,9,13,15,19, and 21 are canceled.

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

4. Authorization for this examiner's amendment was given in a telephone interview with Attorney Jason D. Lohr, Reg. No 48,163 on May 12, 2006.

1. (Currently Amended) A data transcribing method, performed by a computer, for transcribing data from data structure of a structured document to data structure of a program language, including the steps of:

acquiring definition information on document structure of said structured document, definition information on a structure of said program language, and correspondence information between said document structure of said structured document and said structure of said program language,

creating, based on said acquired information, a transcription state storing structure for storing a state of each element for which data in said structured document is to be transcribed into data of said program language, and

transcribing the data in said structured document into the data of said program language while setting the transcribing state of each element in said

transcription state storing structure; [[.]]

wherein, by specifying an iteration number for any specified partial element with partial element correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial element in said structured document are transcribed into said structure of said program language while the transcribing state for the specified partial element is set in said transcription state storing structure.

2. (Currently Amended) A data transcribing method, performed by a computer, for transcribing data from data structure of a program language to data structure of a structured document, including the steps of:

acquiring definition information on document structure of said structured document, definition information on a structure of said program language, and correspondence information between said document structure of said structured document and said structure of said program language,

preparing, based on said acquired information, a transcription state storing structure for storing a state of each element for which data of said program language is to be transcribed into data in said structured document, and

transcribing the data of said program language into the data in said structured document while setting the transcribing state of each element in said transcription state storing structure, [[.]]

wherein, by specifying an iteration number for any a specified partial structure with partial structure correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial structure in said program language are transcribed into said structure of said structured document while the transcribing state for the specified partial element is set in said transcription state storing structure.

Claims 3-5. (Canceled)

6. (Previously Presented) The data transcribing method as claimed in Claim 1, wherein, by specifying partial element correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure is created for the specified partial element, and

wherein data corresponding to said specified partial element in said structured document is transcribed into said structure of said program language while the transcription state is set in the transcription state storing structure.

7. (Canceled)

8. (Previously Presented) The data transcribing method as claimed in Claim 2, wherein, by specifying partial structure correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure is created for the specified partial structure, and

wherein data corresponding said specified partial structure in said structure of said program language is transcribed into said structured document while the transcription state is set in the transcription state storing structure.

9. (Canceled)

10. (Currently Amended) A data transcribing system for transcribing data from data structure of a structured document to data structure of a program language, comprising:

a data transcription processing unit operable to acquire definition information on a document structure of said structured document, definition information on a structure of said program language, and correspondence information between said document structure of said structured document and said structure of said program language, the data transcription processing unit being further operable to:

create, based on said acquired information, a transcription state storing structure for storing a state of each element for which data in said structured document is to be transcribed into data of said program language, and

transcribe the data in said structured document into the data of said program language while setting the transcribing state of each element in said transcription state storing structure; [[.]]

wherein, by specifying an iteration number of any specified partial element with partial element correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial element in said structured document are transcribed into said structure of said program language while the transcribing state for the specified partial element is set in said transcription state storing structure.

11. (Currently Amended) A data transcribing system for transcribing data from data structure of a program language to data structure of a structured document, comprising:

a data transcription processing unit operable to acquire definition information on a document structure of said structured document, definition information on a structure of said program language, and correspondence information between said document structure of said structured document and said structure of said program

language, the data transcription processing unit being further operable to:

prepare, based on said acquired information, a transcription state storing structure for storing a state of each element for which data of said program language is to be transcribed into data in said structured document, and

transcribe the data of said program language into the data in said structured document while setting the transcribing state of each element in said transcription state storing structure, [[.]]

wherein, by specifying an iteration number for any a specified partial structure with partial structure correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial structure in said program language are transcribed into said structure of said structured document while the transcribing state for the specified partial element is set in said transcription state storing structure.

12. (Previously Presented) The data transcribing system as claimed in Claim 10, wherein, by specifying partial element correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure is created for the specified partial element, and

wherein data corresponding to said specified partial element in said structured document is transcribed into said structure of said program language while the transcription state is set in the transcription state storing structure.

13. (Canceled)

14. (Previously Presented) The data transcribing system as claimed in Claim 11,

wherein, by specifying partial structure correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure is created for the specified partial structure, and

wherein data corresponding said specified partial structure in said structure of said program language is transcribed into said structured document while the transcription state is set in the transcription state storing structure.

15. (Canceled)

16. (Currently Amended) A computer program product embedded in a computer-readable medium for transcribing data from data structure of a structured document to data structure of a program language, the computer program product including:

a code segment including instructions for acquiring definition information on document structure of said structured document, definition information on a structure of said program language, and correspondence information between said document structure of said structured document and said structure of said program language,

a code segment including instructions for creating, based on said acquired information, a transcription state storing structure for storing a state of each element for which data in said structured document is to be transcribed into data of said program language, and

a code segment including instructions for transcribing the data in said structured document into the data of said program language while setting the transcribing state of each element in said transcription state storing structure; [[.]]

wherein, by specifying an iteration number of any specified partial element with partial element correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial element in said structured document are transcribed into said structure of said program language while the transcribing state for the specified partial element is set in said transcription state storing structure.

17. (Currently Amended) A computer program product embedded in a computer-readable medium for transcribing data from data structure of a program language to data structure of a structured document, the computer program product including:

a code segment including instructions for a data transcription processing unit operable to acquire definition information on a document structure of said structured document, definition information on a structure of said program language, and correspondence information between said document structure of said structured document and said structure of said program language;

a code segment including instructions for preparing, based on said acquired information, a transcription state storing structure for storing a state of each element for which data of said program language is to be transcribed into data in said structured document, and

a code segment including instructions for transcribing the data of said program language into the data in said structured document while setting the transcribing state of each element in said transcription state storing structure; [[.]]

wherein, by specifying an iteration number of any specified partial element with partial element correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial element in said program language are transcribed into said structure of said structured document while the transcribing state for the specified partial element is set in said transcription

state storing structure.

18. (Previously Presented) The computer program product as claimed in Claim 16, wherein, by specifying partial element correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure is created for the specified partial element, and

wherein data corresponding to said specified partial element in said structured document is transcribed into said structure of said program language while the transcription state is set in the transcription state storing structure.

19. (Canceled)

20. (Previously Presented) The computer program product as claimed in Claim 17, wherein, by specifying partial structure correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure is created for the specified partial structure, and

wherein data corresponding said specified partial structure in said structure of said program language is transcribed into said structured document while the transcription state is set in the transcription state storing structure.

21. (Canceled)

Allowable Subject Matter

5. Claims 1-20 are allowed.

6. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or fairly suggest at least the feature of:

"wherein, by specifying an iteration number for any a specified partial structure with partial structure correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial structure in said program language are transcribed into said structure of said structured document while the transcribing state for the specified partial element is set in said transcription state storing structure", in such a manner as recited in each of the independent claims 1,2,10,11,16, and 17.

The closest prior art of record Corbin (U.S. Pat 6594823) discloses A data transcribing system for transcribing data from data structure of a program language to data structure of a structured document, comprising:

a data transcription processing unit operable to acquire definition information on a document structure of said structured document, definition information on a structure of said program language, and correspondence information between said document structure of said structured document and said structure of said program language, the data transcription processing unit being further operable to:

prepare, based on said acquired information, a transcription state storing structure for storing a state of each element for which data of said program language is to be

transcribed into data in said structured document, and

transcribe the data of said program language into the data in said structured document while setting the transcribing state of each element in said transcription state storing structure,

but does not disclose wherein, by specifying an iteration number for any a specified partial structure with partial structure correspondence between said document structure of said structured document and said structure of said program language in said correspondence information, said transcription state storing structure for the specified iteration number of the specified partial structure is created, and

wherein, for any specified partial element, the specified iteration number of pieces of data corresponding to said specified partial structure in said program language are transcribed into said structure of said structured document while the transcribing state for the specified partial element is set in said transcription state storing structure

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark P. Francis whose telephone number is (571) 272-7956. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WEI ZHEN
SUPERVISORY PATENT EXAMINER